

# **Advanced Practical Computer Applications**

## **Course of Study**

**Black Horse Pike Regional School District**

**Department:**

**Business**

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**Approved by: Mary-Alice Baratta**

**Date: 7/2014**

# **Advanced Practical Computer Application SYLLABUS**

**2014-2015 Academic School-Year**

## **Unit 1: One Note**

**1.1 Create a notebook, sections and pages (9.1.12.F.1) (9.1.12.F.2) (9.4.12.D.5) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)**

**1.2 Apply a template and make subpages (9.1.12.A.1) (9.4.12.D.24) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)**

**1.3 Insert a file (9.1.12.A.2) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)**

**1.4 Add content to subpages (9.4.12.D.14) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)**

**1.5 Insert tables (9.1.12.A.2) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)**

**1.6 Add a screen clippings**

**1.7 Send to OneNote**

**1.8 Share OneNote**

## **Unit 2 Microsoft Word**

**2.1 Review word screen – difference between task bar and status bar, ribbons & tabs, different ways to save (9.1.12.A.2) (9.1.12.F.1) (9.4.12.D.24) (9.4.12.D.30) (8.1.12.A.3) (9.4.12.D.30) (9.4.12.D.30) (8.1.12.A.3)**

**2.2 Review keyboard shortcuts (9.1.12.A.2) (9.1.12.F.2) (9.4.12.D.30) (8.1.12.A.3)**

**2.3 Format for business letters (9.1.12.A.1) (9.1.12.A.2) 9.1.12.F.1) (9.3.12.C.5) (9.4.12.D.5) (9.4.12.D.24) (9.4.12.D.30) (8.1.12.A.3)**

**2.4 Advanced Find and Replace (9.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)**

**2.5 Mail Merge, labels and envelopes (9.1.12.A.1) (9.1.12.A.2) (9.1.12.F.1) (9.4.12.D.30) (8.1.12.A.3)**

**2.6 Creating and modifying styles (9.4.12.D.5) (9.4.12.D.30) (8.1.12.A.3)**

**2.7 Creating outline – using outline feature (9.1.12.A.2) (9.4.12.D.24) (9.4.12.D.30) (8.1.12.A.3)**

**2.8 Tables formulas, advanced formatting (9.1.12.A.1) (9.1.12.A.2) (9.4.12.D.13) (9.4.12.D.30) (8.1.12.A.3)**

**2.9 Word Art with graphics and recolor (9.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)**

**2.10 Smart Art (9.1.12.A.2) (9.4.12.D.14) (9.4.12.D.30) (8.1.12.A.3)**

**2.11 Templates (9.4.12.D.14) (9.4.12.D.30) (8.1.12.A.3)**

## **Unit 2: Excel**

**3.1 Review formatting and formulas** (9.1.12.A.2) (9.1.12.F.2) (9.4.12.D.26) (9.4.12.D.(4)2) (9.4.12.D(4).5) (8.1.12.A.1) (9.4.12.D.30) (8.1.12.A.3)

**3.2 New Formatting Features -- Inserting/Deleting worksheets, Copying/Moving worksheets, Renaming worksheets, Changing worksheet tab colors, Grouping worksheets for editing/formatting, Excel tables w/structured references, Sorting/Filtering tables, Converting tables to ranges, Named ranges, Freezing columns and rows, Using worksheet panes, Conditional formatting, Find/Replace, Rotating entries, Printing titles, Changing orientation, Scaling to fit** (9.1.12.A.2) (9.1.12.F.2) (9.4.12.D.26) (9.4.12.D.(4)2) (9.4.12.D(4).5) (8.1.12.A.1) (9.4.12.D.30) (8.1.12.A.3)

### **3.3 Formulas**

**New -- IF, SUMIF, SUMIFS, COUNTIF, COUNTIFS, PMT, FV, PV, AVG, MAX, MIN, MEDIAN, ROUND, COUNT, COUNTA, NOW, FORECAST, TREND, GROWTH, VLOOKUP, HLOOKUP**

**Nesting formulas, Formulas referencing other worksheets, What-if Analysis, What-if Data Table, Goal Seek, Solver** (9.1.12.A.2) (9.1.12.F.2) (9.4.12.D.26) (9.4.12.D.(4)2) (9.4.12.D(4).5) (8.1.12.A.1) (9.4.12.D.30) (8.1.12.A.3)

**3.5 Enhancing a worksheet: inserting SmartArt, pictures, hyperlinks, etc.** (9.1.12.B.1) (9.4.12.D.14) (9.4.12.D.26) (8.1.12.A.1) (9.4.12.D.30) (8.1.12.A.3)

**3.6 Charting: Types of charts, updating data source, 3-D charts, PivotTables/PivotCharts** (9.1.12.A.1) (9.1.12.A.2) (9.1.12.B.1) (9.4.12.D.14) (9.4.12.D.26) (8.1.12.A.1) (9.4.12.D.30) (8.1.12.A.3)

**3.3 Stock Market project – formulas, charting, stock analysis** (9.1.12.A.1) (9.1.12.A.2) (9.1.12.B.1) (9.1.12.E.2) (9.4.12.D.5) (9.4.12.D.23) (9.4.12.D.26) (8.1.12.A.1) (9.4.12.D.30) (8.1.12.A.3)

## **Unit 3: Access**

**4.1 Understanding database & terminology** (9.1.12.B.1) (9.1.12.F.2) (9.4.12.D.5) (9.4.12.D.27) (9.4.12.D(4).1) (9.4.12.D.30) (8.1.12.A.3)

**4.2 Navigating a datasheet** (9.1.12.A.2) (9.4.12.D.27) (9.4.12.D(4).1) (9.4.12.D.30) (8.1.12.A.3)

**4.3 Changing the appearance of a datasheet** (9.1.12.B.1) (9.4.12.D.27) (9.4.12.D.30) (8.1.12.A.3)

**4.4 Create a database** (9.1.12.A.1) (9.1.12.B.1) (9.4.12.D.4) (9.4.12.D.27) (9.4.12.D(4).1) (9.4.12.D.30) (8.1.12.A.3)

**4.5 Design, create, and save tables** (9.1.12.A.2) (9.1.12.B.1) (9.4.12.D.14) (9.4.12.D.27) (9.4.12.D.30) (8.1.12.A.3)

**4.6 Creating queries** (9.1.12.A.1) (9.4.12.D.27) (9.4.12.D(4).1) (9.4.12.D.30) (8.1.12.A.3)

**3.7 Sort & filter data** (9.1.12.B.1) (9.4.12.D.27) (9.4.12.D.30) (8.1.12.A.3)

**3.8 Specify a primary key** (9.1.12.B.1) (9.4.12.D.27) (9.4.12.D.30) (8.1.12.A.3)

**3.9 Create an input mask** (9.1.12.B.1) (9.4.12.D.27) (9.4.12.D.30) (8.1.12.A.3)

## **Unit 4: Publisher**

**5.1 Publisher basics** (9.1.12.F.1) (9.1.12.F.2) (9.4.12.D.5) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)

**5.2 Choosing templates** (9.1.12.A.1) (9.4.12.D.24) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)

**5.3 Change font & color schemes** (9.1.12.A.2) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)

**5.4 Entering text, pictures** (9.4.12.D.14) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)

**5.5 Working with objects** (9.1.12.A.2) (8.1.12.A.2) (9.4.12.D.30) (8.1.12.A.3)

### **CORE SKILLS COURSE DESCRIPTION**

#### **Advanced Practical Computer Applications**

**Advanced Practical Computer Applications is designed to guide students to become better and more capable software users, to build upon skills learned in Practical Computer Applications, and to teach students advanced computer concepts for processing data into useful information needed in business situations. Specific focus is given to advanced concepts and skills of word processing, spreadsheet, database management, and desktop publishing. The programs of Microsoft Office -- OneNote, Word, Excel, Access, and Publisher – are used. Completing this class will prepare students to take the MS Office Specialist exam if desired**

#### **METHODS OF EVALUATION**

**Daily Classwork Assignments 50%**

**Test 40%**

**Class Participation 10%**

# Black Horse Pike Regional School District

## Curriculum Template

Engaging Students, Fostering Achievement, Cultivating 21st Century Skill

### PART I: UNIT RATIONALE

Why are students learning this content and these skills

<p><b>Course/Unit Title:</b> Advanced Practical Computer Application ONE NOTE</p>	<p><b>Unit Summary:</b> All students will develop note taking skills using MS OneNote.</p>
<p><b>Grade Level(s):</b> 9-12</p>	
<p><b>Essential Question(s):</b></p> <ol style="list-style-type: none"> <li>1. What are the benefits to taking notes electronically?</li> <li>2. What are the benefits of sharing notes electronically?</li> <li>3. How do you tag your notes in onenote?</li> <li>4. What is the Tags Summary pane used for?</li> <li>5. How do you insert different things to enhance your notes?</li> <li>6. How do you use templates?</li> <li>7. How do you create tabs?</li> <li>8. How do you add links, pictures and tables?</li> <li>9. How do you attach files?</li> <li>10. How do you add more sections and pages?</li> <li>11. Why use the cloud?</li> <li>12. What are screen clippings and how do you add them?</li> </ol>	<p><b>Enduring Understanding(s):</b> <b>Students will understand that...</b></p> <ul style="list-style-type: none"> <li>- <b>Note taking is essential to succeeding in school and business</b></li> <li>- <b>Organizing notes electronically is beneficial</b></li> <li>- <b>Tagging items makes it easier to find information</b></li> </ul>

PART II: Instructional Strategies and Resources

Describe the learning Targets, After each target, identify the standard that are applicable

LEARNING TARGET	STANDARD
<p>Students will be able to:</p> <ol style="list-style-type: none"><li>1. Create a notebook and break it into sections and pages</li><li>2. Share information with other students electronically.</li><li>3. Create template for Cornell notes in onenote and use it for school note taking.</li><li>4. Insert pictures, tables and links into a notebook</li><li>5. Create tags using the tag summary pane.</li><li>6. Utilize the cloud (skydrive/one drive) to access the notes from other devices.</li><li>7. Use the screen clipping tools to add to notes that are taken.</li></ol>	<p>Standards</p> <p>WORK.9-12.9.1.12.A.1 WORK.9-12.9.1.12.F.2 ITEC.9-12.9.4.12.K.1 ITEC.9-12.9.4.12.K.11 ITEC.9-12.9.4.12.K.24</p> <p>TEC.9-12.8.1.12 A.8 TEC.9-12.8.1.12 A.9 TEC.9-12.8.1.12 B.1 ITEC.9-12.9.4.12.K.23</p>

Interdisciplinary Connections

English
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Students will engage with the following text:

[http://highered.mcgraw-hill.com/sites/007661395x/student\\_view0/onenote\\_2010\\_tutorial.html](http://highered.mcgraw-hill.com/sites/007661395x/student_view0/onenote_2010_tutorial.html)

**Students will write:**

<p><b><u>Journaling:</u></b> Students will write in journal/notebook</p> <ol style="list-style-type: none"><li>1. Using One Note students will take notes throughout the semester that they can save on a shared drive and access from any web enabled device.</li><li>2. Students will develop a template for Cornell notes to use One note in other classes as deemed possible.</li><li>3. Students will record how to complete certain procedures in One Note.</li></ol>
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**Activities all listed in the shared drive in ONENOTE TUTORIAL PDF  
PART III: TRANSFER OF KNOWLEDGE AND SKILLS  
DESCRIBE THE LEARNING EXPERIENCE.**

**How will students uncover content and build skills.**

**Projects:**

1. Activity 1 Exercise 1-3 Create a Notebook, sections and pages
2. Activity 2 and Exercise 5: Apply a template and make subpage
3. Activity 3 and 4 Add content to a template
4. Activity 5 and Exercise 4 Insert a table
5. Activity 7 and exercise 15; Add a screen clipping, format a list and insert a screen clipping
6. Activity 8 and exercise 20 share and send a one note
- 7: Exercise 17 Search a notebook
8. Exercise 10 Delete a page and insert pictures
9. Exercise 8: Insert a file and a link
10. Exercise 7: Tag a note and use tag summary page

**Class Activities:**

**Teacher generated handouts and assignments**

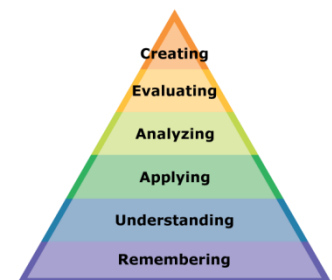
**Smart Board demonstrations**

**Teacher modeling**

**Information from the shared folders**

**PART IV: EVIDENCE OF LEARNING**

**IDENTIFY THE METHODS BY WHICH STUDENTS WILL  
DEMONSTRATE THEIR UNDERSTANDING OF CONTENT  
AND THEIR ABILITY TO APPLY SKILLS. IDENTIFY  
BLOOM'S LEVELS.**



**Formative Assessments:**

Daily projects completed and turned in to ensure student understanding and ability to transfer knowledge. Daily class participation and class work grades

**Accommodations/Modifications:**

- Extra time for class work projects
- Decrease the amount of information that is needed
- Use of visual aids such as whiteboard
- Introduce new vocabulary before the lesson and have that vocab available on onenote

- Provide guided notes when necessary
- Break long assignments into parts. Set separate due dates for each
- Read directions aloud/reread and explain as needed
- Allow student to redo project if they did not understand
- Reinforce positive behavior
- Preferential seating

**Summative Assessments:**

Projects and tests (see appendix in shared district folder)

These assessments are given after students have completed enough of the daily projects with a level of competence. Graded with a rubric.

**Accommodations/Modifications**

Extra time

Less typing of data

**Performance Assessment:**

Electronic portfolio and project

**Accommodations/Modifications**

- Extra time
- Use of visual aids when needed
- Break long assignments into parts with separate due dates
- Provide a word bank when needed
- Read directions/Reread or explain the directions of the test
- Complete sample problems or tasks to model for students



# Black Horse Pike Regional School District Curriculum Template

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

**Course Name: Advanced Practical Computer Applications**

**Course Number:**

## PART I: UNIT RATIONALE

### WHY ARE STUDENTS LEARNING THIS CONTENT AND THESE SKILLS?

<p><b>Course/Unit Title:</b> <b>Advanced PCA</b> Word Processing/Word</p>	<p><b>Unit Summary:</b> Word processors are one of the most used computer programs. Their main purpose is to create, edit, and modify text-based documents that can be printed or used electronically. When students</p>
<p><b>Grade Level(s):</b> <b>10 - 12</b></p>	<p>continue their studies to learn advanced word processing features such as keyboard shortcuts, find/replace, mail merge, macros, styles, outlines, table formulas, SmartArt, etc., they become more proficient users, more efficient employees, and more marketable job candidates.</p>
<p><b>Essential Question(s):</b> Why is it important to know the parts of the Microsoft Word Screen?  Why are keyboard shortcuts useful?  What process would you use to write a letter using Microsoft Word?  Why is a standard business letter format useful?  What is the purpose of using macros.  Why are templates used?  What are some advanced features of Find &amp; Replace and why/when would the features be used?    What are the advantages of using mail merge?</p>	<p><b>Enduring Understanding(s):</b> The teacher explains all lessons/assignments using the screen part names. Word is the most widely used word processing program in the workforce. As future workers, students will need to know/understand professional jargon.  Using keyboard shortcuts will enable the students to be more productive and efficient in the classroom and in the workforce.  Block style letters are the most common used in the workforce. Knowing at least one acceptable letter style, students can easily modify to a company's preferred style if the style is different than Block.  Standard business letter format are used to increase productivity and efficiency in the workforce.  Macros save time by eliminating repetitive keying and formatting.  Templates are used to increase productivity and efficiency in the workforce.  Some advanced features of Find &amp; Replace are matching case, using wildcards, looking for particular formatting, and looking for special characters such as tab or paragraph marks. Find &amp; Replace enables the students to be more efficient when editing documents; therefore the student will be a more productive member of the workforce.  Mail merge is the most efficient and productive way for businesses to complete mass mailings.</p>

When is creating and/or modifying a style useful?	Styles are used to apply a collection of formatting settings all at once which enhance and improve the look of a document. Modifying styles allows for individual tastes and preferences.
What is the purpose of outlines?	Outlines improve organizational skills.
Why are Word tables used?	Tables are used to present information/data in an easy-to-read and understand format.
How do you use formulas in a Word table?	The use of Word table formats and formulas can be applied to Excel applications.
What is the purpose of SmartArt?	SmartArt enhances the look of documents making documents more professional looking.
What are the advantages and disadvantages of using templates?	Templates can increase a worker's productivity and efficiency.

## PART II: INSTRUCTIONAL STRATEGIES AND RESOURCES

### DESCRIBE THE LEARNING TARGETS.

After each target, identify the NJCCCS or Common Core Standards that are applicable

<u>Learning Target</u>	<u>NJCCCS or CCS</u>
1. Label the parts of the Microsoft Word screen.	1. [8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13 ]
2. Match keyboard commands with its function.	2. [8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13 ]
3. Produce a block-style business letter.	3. [8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13 ]
4. Use Microsoft Office templates to produce various documents.	4. 8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13
5. Applies advanced features of Find/Replace to edit various documents.	5. 8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13
6. Constructs macros for repeated phrases and/or forms.	6. 8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13
7. Construct a database file and use mail merge to create various documents.	7. 8.1.8.A.1; 8.1.8.A.2; 9.1.12.A.1; 9.4.12.D.13
8. Modify and/or create a style to enhance the look of various documents.	8. 8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13
9. Construct an outline to organize work to be done.	8. 8.1.8.A.1; 9.1.12.A.1;

10. Produces a Word table and associated chart to display data.	9.4.12.D.13
11. Construct, manipulate, and modify Word tables and use formulas to solve basic math functions.	9. 8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13
12. Applies SmartArt to various documents to enhance and display more professional look.	10. 8.1.8.A.1; 9.4.12.D.13
13. Applies Templates to various documents to increase productivity and efficiency.	11. 8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13; 9.4.12.D.14
<b>Strategies:</b> Lecture will be used to give instruction and oral directions. Peer editing will be used to allow students to help each other. Modeling will be used on the SmartBoard. Pair Share will be used in taking and reviewing Cornell notes. Group discussion of new concepts and features.	12. 8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13  13. 8.1.8.A.1; 9.1.12.A.1; 9.4.12.D.13

**Inter-Disciplinary Connections:**

English: Writing business letters and other business documents. Writing paragraph summaries of Internet research (pg 195; ).  
Math: table with formulas, Internet search for current stock values pg 210  
Social Studies: tables with historical data, Internet research

**Students will engage with the following text:**

Hoggart, Jack P. Ed.D and Jon A. Shank, Ed.D. Century 21 Computer Applications and Keyboarding, 8th Edition. South-Western Publishing, 2006.

**Students will write:**

Daily Warm up/Do Now  
Lesson Reflections  
Internet research summaries  
Cornell Notes

## **PART III: TRANSFER OF KNOWLEDGE AND SKILLS**

### **DESCRIBE THE LEARNING EXPERIENCE.**

**How will students uncover content and build skills.**

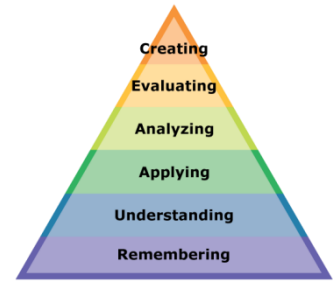
#### **Class activities**

- Teacher-generated Handouts for:
  - Word Screen review
  - Word -- Skills Assessment Test
  - Keyboard shortcuts
  - Find/Replace advanced features, Activity 3 pg 246
  - Styles, Activity 4 pg 416, Activity 6 pg 417
  - SmartArt  
Job 14 -- Organization Chart pg 225
- Assignments
  - **Business Letters – Block Style**  
Teacher-created Format Guide for special parts  
Teacher created Format Guide for different letter styles  
Sample Letter -- Textbook pg 177 – Key and label  
Student creates personal letterhead to be used with all business letters  
Lesson 57 Exercises pg 183  
Lesson 58 Exercises pg 185-186  
Lesson 59 Exercises pg 186-187  
Lesson 76 Document 4 pg 248
  - **Business Letters – 2 pages**  
Lesson 65 Document 3 pg 206  
Lesson 68 Document 2 pg 212  
Lesson 80 Document 1 pg 254-255  
Lesson 113 Letter 1 pg 362; Letter 3 pg 363
  - **Business Letters – Modified Block Style**  
Lesson 77 Exercises pg 249  
Lesson 101 Document 1 pg 310  
Lesson 104 Document 1 pg 316  
Lesson 112 Document 3 and 4 pg 361
  - **Macros**  
Teacher-created guide for recording, running, and editing Macros  
Activity 3 & 4 pg 179  
Form Letters using macros Lesson 79 pg 253  
Job 4 pg 324
  - **Templates**  
Letter templates

- **Mail Merge**
  - Word processing 11 Activity 1-7 pg 357-359
  - Lesson 114 pg 364-365
  - Lesson 115 pg 366-367
  - Lesson 116 pg 368-370
  - Lesson 140 pg 426-427
  - Lesson 143 pg 432-433
  - Lesson 146 Job 1 pg 439, Job 5 pg 440, Job 8 pg 442 (Letterhead), Job 9 pg 442, Job 10 Letter and Labels pg 443
- **Outlines**
  - Purpose of outlines pg 259
  - Activity 1 pg 260
  - Lesson 81 Document 1 pg 262
  - Lesson 102 Document 1 pg 312
  - Lesson 105 Document 1 pg 318
- **Tables—Advanced Editing Features**
  - Lesson 61 Tables 1-4 pg 194-195
  - Lesson 62 Tables 1-3 pg 197
  - Lesson 63 Tables 1-3 pg 198-199
  - Lesson 64 Tables 1-3 pg 200-201
  - Lesson 67 Tables 1-3 pg 209-210
  - Lesson 70 Tables 1-3 pg 215-216
  - Word Processing 13 Activity 1-5 pg 395-397
  - Lesson 126 Tables 1-4 pg 398
  - Lesson 127 Tables 1-4 pg 399
  - Lesson 128 Tables 1-7 pg 400-401
  - Lesson 129 Tables 1-6 pg 402-403
  - Lesson 131 Table pg 407
  - Lesson 145 Document 1 pg 436
  - Lesson 146 Job 3 pg 440, Job 12 pg 444
- **Agendas**
  - Lesson 131 Agenda 1-3 pg 406-407
  - Lesson 142 Document 2 pg 430
  - Lesson 145 Document 2 pg 436
  - Lesson 146 Job 4 pg 440
- **Table of Contents**
  - Handout – formatting guide
  - Lesson 134 Activity 13 & 14 pg 423-424

## PART IV: EVIDENCE OF LEARNING

IDENTIFY THE METHODS BY WHICH STUDENTS WILL DEMONSTRATE THEIR UNDERSTANDING OF CONTENT AND THEIR ABILITY TO APPLY SKILLS.  
IDENTIFY BLOOM'S LEVELS.



### Formative Assessments:

Classwork assignments, tests, participation

### Accommodations/Modifications:

### Summative Assessments:

End of unit test

### Accommodations/Modifications:

### Performance Assessments:

Teacher observed skills assessment checklist test

### Accommodations/Modifications:

## PART I: UNIT RATIONALE

Why are students learning this content and these skills?

<b>Course/Unit Title:</b> Advanced Practical Computer Application EXCEL	<b>Unit Summary:</b> All students will develop critical thinking and problem-solving skills as they relate to Microsoft Office. In this unit the students will develop strategies for creating and manipulating Excel spreadsheets and workbooks. Standards 9.1.12.A., 9.1.12.B, 9.1.12.E, 9.1.12.F, 9.4.12.D
<b>Grade Level(s):</b> 9-12	
<b>Essential Question(s):</b> <ol style="list-style-type: none"><li>1. How are various functions used in Excel to create database spreadsheets?</li><li>2. Why is it important to use formulas in an Excel spreadsheet?</li><li>3. How can formulas and functions be used to analyze the stock market?</li><li>4. Why does sorting data in Excel have benefits of time management?</li><li>5. What advantages does enhancing a worksheet with colors and graphics hold?</li><li>6. How and Why is it helpful to create charts in Excel?</li></ol>	<b>Enduring Understanding(s):</b> Students will understand that... <ul style="list-style-type: none"><li>- Excel can have advantages in personal and professional lives.</li><li>- Excel can be used to create spreadsheets of data for many different topics.</li><li>- Excel has formulas and functions that can make everyday life easier.</li></ul>

PART II: Instructional Strategies and Resources

**Describe the learning Targets, After each target, identify the standard that are applicable**

LEARNING TARGET	STANDARD
<p><b>Students will be able to:</b></p> <ol style="list-style-type: none"> <li><b>1. Describe the features of the Excel window</b></li> <li><b>2. Apply the If Statment function</b></li> <li><b>3. Apply the PMT function</b></li> <li><b>4. Apply the FV &amp; PV functions</b></li> <li><b>5. Apply the AVG, MAX, and MIN functions</b></li> <li><b>6. Create a stock market project including formulas, charts, and stock analysis</b></li> <li><b>7. Sort data according to information</b></li> <li><b>8. Enhance a worksheet using color, smart art, and pictures.</b></li> <li><b>9. Chart various data.</b></li> </ol>	<p>1. 9.1.12.A.2, 9.1.12.F.2, 9.4.12.D.26, 9.4.12.D.(4)2, 9.4.12.D(4).5)</p> <p>2. 9.1.12.A.1, 9.1.12.A.2, 9.1.12.B.1, 9.1.12.F.1, 9.4.12.D.4, 9.4.12.D.26, 9.4.12.D.(4)2, 9.4.12.D(4).5</p> <p>3. 9.1.12.A.1, 9.1.12.A.2, 9.1.12.B.1, 9.1.12.F.1, 9.4.12.D.4, 9.4.12.D.26, 9.4.12.D.(4)2, 9.4.12.D(4).5</p> <p>4.9.1.12.A.1, 9.1.12.A.2, 9.1.12.B.1, 9.1.12.F.1, 9.4.12.D.4, 9.4.12.D.26, 9.4.12.D.(4)2, 9.4.12.D(4).5</p> <p>5.9.1.12.A.1, 9.1.12.A.2, 9.1.12.B.1, 9.1.12.F.1, 9.4.12.D.4, 9.4.12.D.26, 9.4.12.D.(4)2, 9.4.12.D(4).5</p> <p>6. 9.1.12.A.1, 9.1.12.A.2, 9.1.12.B.1, 9.1.12.E.2, 9.4.12.D.5, 9.4.12.D.23, 9.4.12.D.26</p> <p>7. 9.1.12.B.1, 9.4.12.D.26</p> <p>8. 9.1.12.B.1., 9.4.12.D.14, 9.4.12.D.26</p> <p>9. 9.1.12.A.1, 9.1.12.A.2, 9.1.12.B.1., 9.4.12.D.14, 9.4.12.D.26</p>

Interdisciplinary Connections

History - Stock Market Background  
 Math - Formulas & Functions  
 Art - Enhancing Excel with Smart Art, Pictures, and Graphics



Students will engage with the following text:  
"EXCEL IT!" Business Education Publishing, McGuinness, Martha

**Students will write:**

**Journaling:**

Students will write in journal/notebook

1. Steps needed to create and manipulate data in Exce;
2. Reflections on the project that was completed that day, drawing conclusions from questions that are asked.

**PART III: TRANSFER OF KNOWLEDGE AND SKILLS**

**DESCRIBE THE LEARNING EXPERIENCE.**

**How will students uncover content and build skills.**

**Projects:**

1. Label all parts of an excel screen. Using prior knowledge have the students label as much as they can on the worksheet and then as a class complete the rest of the worksheet on the smartboard.
2. Activity 52 in the EXCEL It book, PMT functions
3. Activity 53 in the EXCEL it book, PMT functions
4. Activity 50 in the EXCEL it book, Mean & Mode
5. Stock Market Project: Steps #1-6, set up entire workbook of formulas & functions
6. Stock Market Project: Background activities such as researching parent companies, stock symbols, and stock market history.

**Class Activities:**

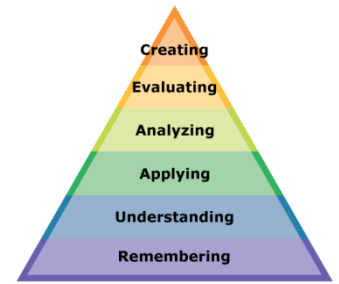
**Teacher generated handouts and assignments**

**Smart Board demonstrations**

**Teacher modeling**

## **PART IV: EVIDENCE OF LEARNING**

**IDENTIFY THE METHODS BY WHICH STUDENTS WILL DEMONSTRATE THEIR UNDERSTANDING OF CONTENT AND THEIR ABILITY TO APPLY SKILLS. IDENTIFY BLOOM'S LEVELS.**



### **Formative Assessments:**

Daily projects completed and turned in to ensure student understanding and ability to transfer knowledge. Daily class participation and classwork grades.

### **Accommodations/Modifications:**

- Extra time for class work projects
- Decrease the amount of information that is needed
- Use of visual aids such as whiteboard
- Introduce new vocabulary before the lesson and have that vocab available on Quizlet
- Provide guided notes when necessary
- Break long assignments into parts. Set separate due dates for each
- Read directions aloud/reread and explain as needed
- Allow student to redo project if they did not understand
- Reinforce positive behavior
- Preferential seating

### **Summative Assessments:**

Projects and tests

These assessments are given after students have completed enough of the daily projects with a level of competence. Graded with a rubric.

### **Accommodations/Modifications**

Extra time  
Less typing of data

### **Performance Assessment:**

Electronic portfolio and project

Project will require students to analyze information in the database to form conclusions

### **Accommodations/Modifications**

- Extra time
- Use of visual aids when needed
- Break long assignments into parts with separate due dates
- Provide a word bank when needed
- Read directions/Reread or explain the directions of the test
- Complete sample problems or tasks to model for students

## PART I: UNIT RATIONALE

Why are students learning this content and these skills?

<b>Course/Unit Title:</b> Advanced Practical Computer Application ACCESS UNIT	<b>Unit Summary:</b> All students will develop critical thinking and problem-solving skills as they relate to Microsoft Office. In this unit the students will develop strategies for creating and manipulating databases created in MS Access. Standards 9.1.12.B.1, F.2;9.4.12.D.5,27,30
<b>Grade Level(s):</b> 9-12	
<b>Essential Question(s):</b> <ol style="list-style-type: none"><li>1. What are the differences between a table, record and field in a MS Access?</li><li>2. Describe the use and function of a database management system?</li><li>3. What are the differences between design view and datasheet view in MS access?</li><li>4. Why is it important to create a query using a database?</li><li>5. When and why would you use database to organize data instead of spreadsheets?</li><li>6. What information should be gathered to include in database?</li><li>7. Why and how do you establish relationships in tables?</li></ol>	<b>Enduring Understanding(s):</b> Students will understand that... <ul style="list-style-type: none"><li>- Access allows for database manipulation</li><li>- There are differences and similarities of Access and Excel</li><li>- Benefits of inputting information into a database</li></ul>

PART II: Instructional Strategies and Resources

**Describe the learning Targets, After each target, identify the standard that are applicable**

<b>LEARNING TARGET</b>	<b>STANDARD</b>
<p><b>Students will be able to:</b></p> <ol style="list-style-type: none"><li><b>1. Describe the features of the access window</b></li><li><b>2. Create and manage a database</b></li><li><b>3. Apply application parts</b></li><li><b>4. Create table and add records</b></li><li><b>5. Create and modify fields</b></li><li><b>6. Sort and filter records</b></li><li><b>7. Set relationships using primary keys</b></li><li><b>8. Enter and format text</b></li><li><b>9. Import data from a single data file</b></li><li><b>10. Create forms and apply form design tab options</b></li><li><b>11. Create and manage queries</b></li><li><b>12. Set input masks</b></li></ol>	<p>Standards</p> <p>9.1.12.B.1, F.2;9.4.12.D.5,27,30</p> <p>ITEC.9-12.9.4.12.K.(4).10</p>

Interdisciplinary Connections

English  
Math

Students will engage with the following text:

“ACCESS IT!” Business Education Publishing, McGuiness, Martha

**Students will write:**

**Journaling:**

Students will write in journal/notebook

1. Steps needed to create and manipulate data in Access
2. Reflections on the project that was completed that day, drawing conclusions from questions that are asked.

**PART III: TRANSFER OF KNOWLEDGE AND SKILLS****DESCRIBE THE LEARNING EXPERIENCE.**

**How will students uncover content and build skills.**

**Projects:**

1. Label all parts of an access screen. Using prior knowledge have the students label as much as they can on the worksheet and then as a class complete the rest of the worksheet on the smartboard.
2. Activity 1 in the ACCESS It book Celebrity addresses to create, save and print a database and a table. Additional projects available in Access folder in shared directory called "Access project 1"
3. Activity 2 Rap albums formatting number fields and sorting also in access folder "presidents"
4. Activity 3 Movies Formatting in currency field and sorting in descending order
5. Primary key lesson: Activity 9 in ACCESS IT and Yearbook in the shared folder
6. Query - Activity 6 Nascar and in access folder Presidents
7. Input Mask -

**Class Activities:**

- **Teacher generated handouts and assignments**
- **Smart Board demonstrations**
- **Teacher modeling**
- **Information from the shared folders**

**PART IV: EVIDENCE OF LEARNING**

**IDENTIFY THE METHODS BY WHICH STUDENTS WILL DEMONSTRATE THEIR UNDERSTANDING OF CONTENT AND THEIR ABILITY TO APPLY SKILLS. IDENTIFY BLOOM'S LEVELS.**

**Formative Assessments:**

Daily projects completed and turned in to ensure student understanding and ability to transfer knowledge. Daily class participation and classwork grades.

**Accommodations/Modifications:**

- Extra time for class work projects
- Decrease the amount of information that is needed
- Use of visual aids such as whiteboard
- Introduce new vocabulary before the lesson and have that vocab available on Quizlet
- Provide guided notes when necessary
- Break long assignments into parts. Set separate due dates for each
- Read directions aloud/reread and explain as needed
- Allow student to redo project if they did not understand
- Reinforce positive behavior
- Preferential seating

**Summative Assessments:**

Projects and tests (see appendix in shared district folder)

These assessments are given after students have completed enough of the daily projects with a level of competence. Graded with a rubric.

**Accommodations/Modifications**

Extra time

Less typing of data

**Performance Assessment:**

Electronic portfolio and project

Project will require students to analyze information in the database to form conclusions

**Accommodations/Modifications**

- Extra time
- Use of visual aids when needed
- Break long assignments into parts with separate due dates
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- Read directions/Reread or explain the directions of the test
- Complete sample problems or tasks to model for students

## PART I: UNIT RATIONALE

Why are students learning this content and these skills?

<p><b>Course/Unit Title:</b> Advanced Practical Computer Application PUBLISHER UNIT</p>	<p><b>Unit Summary:</b> All students will develop critical thinking and problem-solving skills as they relate to Microsoft Office. In this unit the students will develop strategies to determine how to effectively communicate a message using MS Publisher, including graphics, text and advanced formatting.</p>
<p><b>Grade Level(s):</b> 9-12</p>	
<p><b>Essential Question(s):</b></p> <ol style="list-style-type: none"><li>1. How can you use MS Publisher to create brochures, business cards and advertisements with similar themes for recognition</li><li>2. What different fonts are most effective when creating different publishing pieces?</li><li>3. What is WYSIWYG?</li><li>4. What are the most important purpose of design is to communicate in a clear, effective way to produce good design to communicate the intended message</li><li>5. What are the six basic steps to publishing process?</li><li>6. Why is it important to identify your target market when creating a publication?</li><li>7. What design elements are incorporated in advertisements or publications?</li><li>8. What make a publication's layout appealing and easy to read?</li></ol>	<p><b>Enduring Understanding(s):</b> Students will understand that...</p> <ul style="list-style-type: none"><li>- <b>Creating and designing publications with similar themes to create awareness</b></li><li>- <b>Applying publisher skills for business and educational uses</b></li></ul>

## PART II: Instructional Strategies and Resources

Describe the learning Targets, after each target, identify the standard that are applicable

LEARNING TARGET	STANDARD
<p>Students will be able to:</p> <ol style="list-style-type: none"><li>1. Use the tools in Publisher to change text style of the document</li><li>2. Create greeting card, sign, poster, invitation, flyer, business card, newsletter</li><li>3. Create, format and edit multicolumn and single column publications</li><li>4. Place, scale, crop and frame images in a publication.</li><li>5. Understand how to align text and objects</li><li>6. Utilize tables in various publications</li></ol>	<p>Standards 3.1 F1, F2, F3, 4.2 D1, D2 8.1 A6, A8 9.1 A1, A5, B1, B2, B3, B5</p>

Interdisciplinary Connections

English  
Art

Students will engage with the following text:  
“PUBLISH IT!” Business Education Publishing, McGuinness, Martha

**Students will write:**

Create publications and write copy for brochures.

## PART III: TRANSFER OF KNOWLEDGE AND SKILLS



## **DESCRIBE THE LEARNING EXPERIENCE.**

### **How will students uncover content and build skills.**

#### **Projects:**

1. Label all parts of an publisher screen. Using prior knowledge have the students label as much as they can on the worksheet and then as a class complete the rest of the worksheet on the smartboard.
2. Project #5 how to create and design business letterhead
3. Project #8 Create and design a campaign poster
4. Project #9 Create and design an award certificate
5. Project #11 Create and design an admission ticket
6. Project #16 create and design greeting card
7. Project #18 create and design business card
8. Project # 20 Create and design an event invitation
9. Project # 34 Create and design a three panel brochure
10. Project # 33 Create and design a Restaurant menu
11. Project # 32 create and design a word search puzzle
12. Project #30 create and design a candy bar wrapper
13. Other options are the concert tour book for other creative options

#### **Class Activities:**

- **Teacher generated handouts and assignments from Publish it**
- **Smart Board demonstrations**
- **Teacher modeling**
- **Information from the shared folders**

## **PART IV: EVIDENCE OF LEARNING**

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